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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,103	11/21/2001	Hiroshi Hashimoto	SIW-023	2875

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LAHIVE & COCKFIELD
28 STATE STREET
BOSTON, MA 02109

EXAMINER

MANCHO, RONNIE M

ART UNIT	PAPER NUMBER
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3663

DATE MAILED: 09/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/991,103

Applicant(s)

HASHIMOTO ET AL.

Examiner

Ronnie Mancho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1,2,7 and 8 is/are rejected.
- 7) ☒ Claim(s) 3,5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 5, 6, 7, and 8 are objected to because of the following informalities:

In claim 5, the applicant is advised to change “an priority” to -- a priority -- for clarity.

In claim 6, the applicant is advised to change “the communication protocol” to -- a communications protocol -- for clarity.

In claim 7, the applicant is advised to change the following:

In line 1, the applicant is advised to insert a colon “:” after -- comprising -- for clarity.

In line 5, as numbered, the applicant is advised to cancel -- comprises --.

In line 6, the applicant is advised to change “ports, and” to -- ports; -- for clarity.

In line 11, the applicant is advised to change “data; and wherein,” to --data, wherein-- for clarity.

In line 13, the applicant is advised to change “among” to -- of -- for clarity.

In line 14, the applicant is advised to change “ports; and” to -- ports, and wherein -- for clarity.

In line 17, the applicant is advised to cancel -- different -- for clarity.

In line 20, the applicant is advised to cancel --said--.

In claim 8, the applicant is advised to change the following:

In line 1, the applicant is advised to insert a colon “:” after -- comprising -- for clarity.

In line 8, the applicant is advised to change “ports, and” to --port;-- for clarity.

In line 10, the applicant is advised to change “data, and” to --data;-- for clarity.

In line 12, the applicant is advised to change “device; and” to --device;-- for clarity.

In line 15, the applicant is advised to change "ports; and furthermore:" to -- ports, wherein -- for clarity.

In line 17, the applicant is advised to cancel -- said -- for clarity.

In line 20, the applicant is advised to change "said " to --a-- for clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, 7, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Gruenwald et al (6484830).

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Regarding claim 1, Gruenwald et al (figs. 1-4) disclose a vehicle control system comprising:

a plurality of control devices (see for e.g. fig. 4; all accessory drive unit, air compressor unit, power steering unit, etc) which forms a plurality of subsystems connected to respective controlled objects (AC, power steering cooling pumps, etc) and a cooperative control device (vehicle system controller, fig. 4) which cooperatively operates said plurality of control devices (see for e.g. fig. 4; all accessory drive unit, air compressor unit, power steering unit, etc) through a communication line (see the circuit in fig. 4), wherein each of said plurality of control devices (see for e.g. fig. 4; all accessory drive unit, air compressor unit, power steering unit, etc) comprises an input/output control device (i.e. each of the units have an input/output connection) for conducting input and output processing for the signals sent and received between said cooperative control device (vehicle systems controller) and said controlled objects (AC, power steering cooling pumps, etc), wherein

said cooperative control device (vehicle systems controller) comprises a control calculation device for calculating control signals which control operations of said plurality of control devices (see for e.g. fig. 4; all accessory drive unit, air compressor unit, power steering unit, etc) and said controlled objects (AC, power steering cooling pumps, etc) based on the received signals that have been received from said plurality of control devices (AC, power steering cooling pumps, etc). Note! Applicants are referred to col. 5, lines 9 to col. 6, lines 65; col. 4, lines 27-67 as the limitations are self-explanatory.

Regarding claim 2, Gruenwald et al disclose the vehicle control system according to claim 1 wherein said control calculation device of said cooperative control device (vehicle

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systems controller) calculates controlled physical values to be attained by operations of said plurality of control devices (see for e.g. fig. 4; all accessory drive unit, air compressor unit, power steering unit, etc) and said controlled objects (AC, power steering cooling pumps, etc) as control signals which control the operation of said plurality of control devices and said controlled objects; and

said input/output control devices of said control system convert said controlled physical values which have been received from said cooperative control device (vehicle systems controller) to operation command values that indicate directly the operation of said control devices see for e.g. fig. 4; all accessory drive unit, air compressor unit, power steering unit, etc) and said controlled objects (AC, power steering cooling pumps, etc). Note! Applicants are referred to col. 5, lines 9 to col. 6, lines 65; col. 4, lines 27-67 as the limitations are Self-explanatory.

Regarding claim 7, Gruenwald et al (figs. 1-4) disclose a vehicle control system comprising a plurality of control devices which forms a plurality of subsystems connected to respective controlled objects and a cooperative control device which cooperatively operates said plurality of control devices through a communication line, wherein the vehicle control system further comprises:

- said cooperative control device, wherein said cooperative control device;
- a plurality of different cooperative control side communication ports;
- a data sending and receiving device that carries out transmission and receiving of data to and from said plurality of control devices through said cooperative control side communication ports;

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a determination device that determines whether or not an abnormality has occurred in the transmission and receiving of said data, wherein

said plurality of control devices each comprise a plurality of communication ports that connect at least two or more of said plurality of cooperative control side communication ports, and wherein

said data sending and receiving device of said cooperative control device, depending on the results of the determination by the determination device, sends and receives said data to and from each of said plurality of communication ports of said control devices, and in addition, said data sent to and received from said communication ports where said abnormality has occurred is sent to and received from any communication ports where said abnormality has not occurred.

Note! Applicants are referred to col. 5, lines 9 to col. 6, lines 65; col. 4, lines 27-67 as the limitations of claim 1 above.

Regarding claim 8, Gruenwald et al (figs. 1-4) disclose a vehicle control system comprising:

a plurality of control devices which forms a plurality of subsystems connected to respective controlled objects and a cooperative control device which cooperatively operates said plurality of control devices through a communication line, wherein the vehicle control system further comprises:

a plurality of different cooperative control side communication ports, a data sending and receiving device that sends and receives data to and from said plurality of control device through said cooperative control side communication ports;

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a determination device that determines whether or not an abnormality has occurred in the sending or receiving of said data;

a data partitioning devices that generates a plurality of segments of partitioned data by partitioning said data according to the results of the determination by said determination device;

said plurality of control devices each comprising a plurality of communication ports that connect at least two or more of said plurality of cooperative control side communication ports, wherein

said data sending and receiving device of said cooperative control device sends and receives different data to and from each of said plurality of communication ports of said control device depending on the result of the determination of said determination apparatus, and in addition, said plurality of partitioned data is sent and received by being distributed over a plurality of communication ports on which no abnormality has occurred.

Note! Applicants are referred to col. 5, lines 9 to col. 6, lines 65; col. 4, lines 27-67 as the limitations of claim 1 above.

Allowable Subject Matter

4. Claim 4 is allowed.

5. The following is an examiner's statement of reasons for allowance:

In claim 4, the prior art does not disclose the limitation "a priority assigning device which assigns a priority to the data sent and received via said communication lines;

a plurality of FIFO storage devices which temporarily store said data after being classified depending on said priority; and

a data sending device which sends said data according to its priority from said FIFO storage device which stores said data having high priority.”

Claims 5 and 6 will be allowed when the objections therein are overcome.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

In claim 3, the prior art does not disclose the limitations “the vehicle control system according to claim 1 wherein said plurality of control devices provides an autonomous control device which controls the operations of said controlled objects independently from said cooperative control device during the occurrence of an abnormality between said communication systems and said cooperative control devices or said cooperative control device.”

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following: 5643352, 4236594, 2002/0101210, 6499027, 5487002, and 5296869.

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Communication

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 703-305-6318. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Ronnie Mancho
Examiner
Art Unit 3663

August 24, 2003


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600